REMARKS[1]

In the Office Action, the Examiner took the following actions:

1. rejected claims 1, 2, and 11 under 35 U.S.C. § 103(a) as being unpatentable over alleged applicant admitted prior art ("AAPA") in view of U.S. Patent No. 7535828 to Raszuk et al. (*"Raszuk"*) and further in view of U.S. Patent App. Pub. No. 2003/0031125 to Oyamada et al. (*"Oyamada"*);

2. rejected claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk* and further in view of *Oyamada*, and further in view of U.S. Patent App. Pub. No. 2006/0193248 to Filsfils et al. (*"Filsfils"*);

3. rejected claims 5-9 and 12-15 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk* and further in view of *Oyamada*, and further in view of U.S. Patent No. 7,343,423 to Goguen et al. (*"Goguen"*); and

4. rejected claims 10, 16, and 17 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk* and further in view of *Oyamada*, and further in view of *Goguen*, further in view of *Filsfils* and further in view of US Patent No. 7,646,710 to Christie (*"Christie"*).

By this Amendment, Applicant has amended independent claims 1 and 11. Claims 1-17 remain pending and under examination. Applicant respectfully requests reconsideration and allowance of the application for at least the reasons set forth below.

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[1] As Applicant's remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicant's silence as to certain assertions or requirements applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicant that such assertions are accurate or such requirements have been met, and Applicant reserves the right to analyze and dispute such in the future.

Rejection of Claims 1, 2, and 11 under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 1, 2, and 11 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk*, and further in view of *Oyamada*. A *prima facie* case of obviousness has not been established.

"The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. ... [R]ejections on obviousness cannot be sustained with mere conclusory statements." M.P.E.P. § 2142, 8th Ed., Rev. 6 (Sept. 2007) (internal citation and inner quotation omitted). "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art." M.P.E.P. § 2143.01(III) (emphasis in original). "All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03. "In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." M.P.E.P. § 2141.02(I) (emphases in original).

"The framework for objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). ... The factual inquiries ... [include determining the scope and content of the prior art and] ... ascertaining the differences between the claimed invention and the prior art." M.P.E.P. § 2141(II). "Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art." M.P.E.P. § 2141(III).

Independent claim 1 calls for a combination including, for example, "setting routing information and tunnel state information for each of at least two tunnels, by a double-ascription

Provider Edge (PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with a nearby CE, before the nearby CE visits the remote CE, wherein, the double-ascription PE connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively" (emphasis added). AAPA, *Raszuk*, and *Oyamada*, whether taken alone or in any combination, fail to teach or suggest at least these elements.

To better illustrate the difference between AAPA and the claims, figure 1 of the present application is reproduced below. For example, consistent with embodiments of the present application, as shown in reproduced figure 1, PE-A, P-C, and PE-E may constitute, for example, a primary tunnel, while PE-B, P-D, and PE-E may constitute, for example, a backup tunnel. Consistent with embodiments of the present application, routing information and tunnel state information of both tunnels may be set and stored in the double-ascription PE-E before the nearby CE-B visits the remote CE-A.
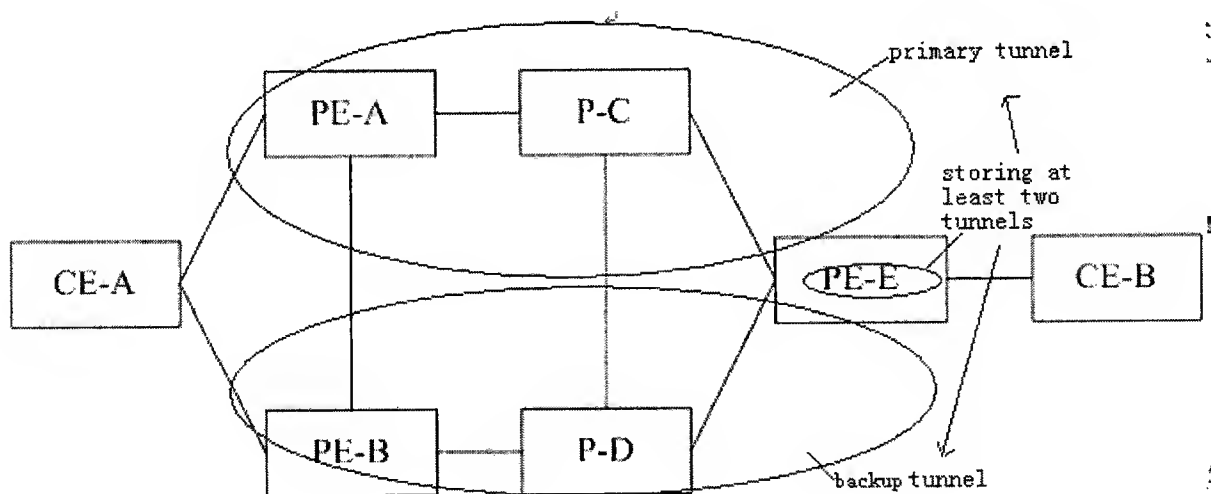

Figure 1

In contrast, AAPA discloses that "[t]he PE-E selects the route advertised by the PE-A as the optimal route, then the PE-E fills in a forwarding item used by a forwarding engine <u>only the routing information advertised by the PE-A</u>." Specification, par. [0011], (emphasis added).

That is, according to AAPA, <u>before PE-A fails to function</u>, PE-E itself <u>only stores a routing information advertised by PE-A</u>. For example, a tunnel according to AAPA may be PE-E→P-C→ PE-A, <u>not relating to another tunnel</u>. According to AAPA, PE-E only seeks and stores information from PE-B after PE-A fails to function. Therefore, in AAPA, before CE-B visits CE-A, only the information for one tunnel, but not that for all tunnels, is set and stored in PE-E.

In view of the above, AAPA fails to disclose or teach "setting routing information and tunnel state information for each of at least two tunnels, by a double-ascription Provider Edge (PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with a nearby CE, <u>before the nearby CE visits the remote CE</u>, wherein, the double-ascription PE connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively," as recited in claim 1 (emphasis added).

Raszuk fails to cure the deficiencies of AAPA. *Raszuk*, discloses that "[when] a CE1 node failure or PE1-CE1 link failure [occurs], PE1 establishes a fast reroute (FRR) back up path 205 ... In this example, PE1 selects PE3 as a backup PE device and thus the backup path 205 is used to reroute packets from PE1 to PE3 to CE2." *Raszuk*, col. 10, ll. 45-51, *see*, also, figure 2 reproduced below.

That is, *Raszuk* may at best discloses that PE1, which is <u>connected to remote CE1</u>, selects a backup path, but does not teach that PE4, which is connected to nearby CE3, stores information

of backup paths and selects a backup path. Moreover, in *Raszuk*, at best the information of one

backup path, rather than information of at least two paths, is stored in PE1.
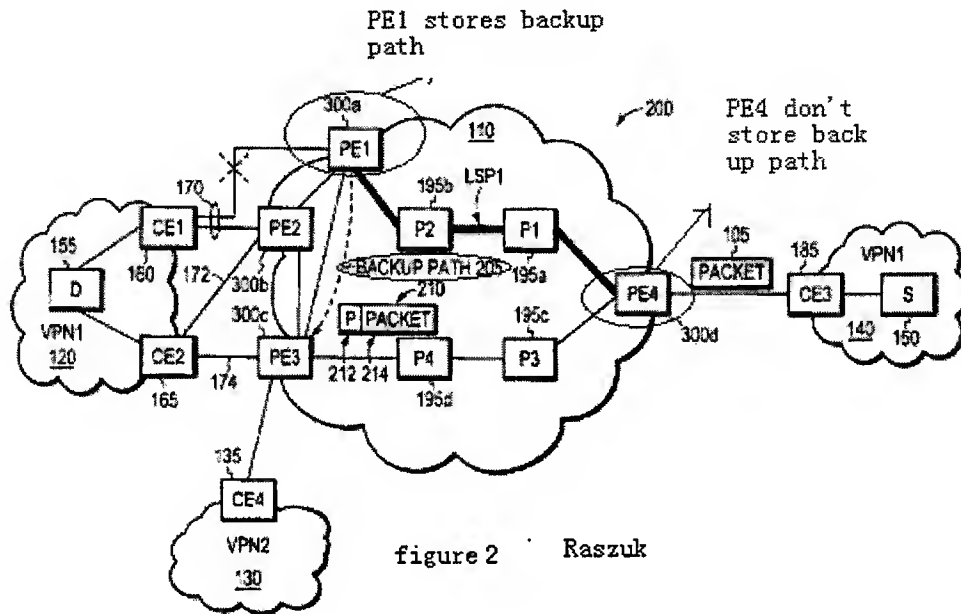

figure 2   Raszuk

Furthermore, tunnels in *Raszuk* are different from those consistent with embodiments of the

present application. In *Raszuk*, wherein an initial node of the backup tunnel 205 is <u>PE1</u>

<u>connected with the remote CE1</u>, a terminal node of the backup tunnel 205 is <u>PE3 connected with</u>

<u>the remote CE2</u>. *See, e.g.*, figure 2 of *Raszuk* reproduced above. That is, in *Raszuk*, <u>PE1</u> stores a

backup path 502: <u>PE1→PE3→CE2</u>, but not a path including the double ascription PE4.

In view of the above, *Raszuk* also fails to teach or suggest "setting routing information and

tunnel state information for each of at least two tunnels, by a double-ascription Provider Edge

(PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with

a nearby CE, <u>before the nearby CE visits the remote CE</u>, wherein, the double-ascription PE

connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at

least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively," as recited in claim 1 (emphasis added), and thus does not cure the deficiencies of AAPA.

Oyamada also fails to cure the deficiencies of AAPA and *Raszuk*. *Oyamada* discloses two different tables: an OSI tunnel table in an OSI network and an IP routing table in an IP network (*See Oyamada*, FIGs. 13, 16, and 15). The state of tunnels are stored in the OSI tunnel table, but not in the routing table. Obviously, *Oyamada* also fails to teach or suggest the above-quoted elements recited in claim 1 and thus does not cure the deficiencies of AAPA and *Raszuk*.

For at least the reasons discussed above, the Office has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the invention of amended claim 1. Moreover, there is no motivation for one of ordinary skill in the art to modify the references to achieve the claimed combination. Thus, no reason has been clearly articulated as to why claim 1 would have been obvious to one of ordinary skill in the art in view of the prior art. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 1, and claim 1 is allowable.

Independent claim 11, although different in scope from independent claim 1, recites elements similar to those of claim 1. As such, for reasons similar to those discussed above in regard to the rejection of claim 1, claim 11 is allowable. Claim 2 is also allowable at least by virtue of its dependence from claim 1.

Rejection of Claims 3 and 4 under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk* and *Oyamada*, and further in view of *Filsfils*. A *prima facie* case of obviousness has not been established.

Claims 3 and 4 depend from claim 1, and thus include all the elements thereof. As discussed above in regard to the rejection of claim 1, AAPA, *Raszuk*, and *Oyamada*, whether taken alone or in combination, fail to teach or suggest at least "setting routing information and tunnel state information for each of at least two tunnels, by a double-ascription Provider Edge (PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with a nearby CE, <u>before the nearby CE visits the remote CE,</u> wherein, the double-ascription PE connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively," as recited in claim 1 (emphasis added) and included in claims 3 and 4.

The Office asserted that *Filsfils* teaches elements of claims 3 and 4. *See* Office Action, pp. 5-6. Without acquiescing to this assertion, Applicant respectfully submits that *Filsfils* also fails to teach or suggest the above-noted elements, and thus does not cure the deficiencies of AAPA, *Raszuk*, and *Oyamada*.

For at least this reason, the Office has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the invention of claims 3 and 4. Moreover, there is no motivation for one of ordinary skill in the art to modify the references to achieve the claimed combination. Thus, no reason has been clearly articulated as to why claims 3 and 4 would have been obvious to one of ordinary skill in the art in view of the prior art. Accordingly, a *prima facie* case of obviousness has not been established with respect to claims 3 and 4, and the claims are allowable.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 3 and 4 under 35 U.S.C. § 103(a).

Rejection of Claims 5-9 and 12-15 under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 5-9 and 12-15 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk* and *Oyamada*, and further in view of *Goguen*. A *prima facie* case of obviousness has not been established.

Claims 5-9 and 12-15 ultimately depend from claim 1, and thus include all the elements thereof. As discussed above in regard to the rejection of claim 1, AAPA, *Raszuk*, and *Oyamada*, whether taken alone or in combination, fail to teach or suggest at least "setting routing information and tunnel state information for each of at least two tunnels, by a double-ascription Provider Edge (PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with a nearby CE, before the nearby CE visits the remote CE, wherein, the double-ascription PE connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively," as recited in claim 1 (emphasis added) and included in claims 5-9 and 12-15.

The Office asserted that *Goguen* teaches elements of claims 5-7, 9, 14, and 15. *See* Office Action, pp. 7-8. Without acquiescing to this assertion, Applicant respectfully submits that *Goguen* also fails to teach or suggest the above-noted elements, and thus does not cure the deficiencies of AAPA, *Raszuk*, and *Oyamada*.

For at least this reason, the Office has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the invention of claims 5-9 and 12-15. Moreover, there is no motivation for one of ordinary skill in the art to modify the references to achieve the claimed combination. Thus, no reason has been clearly articulated as to why claims 5-9 and 12-15 would have been obvious to one of ordinary skill in

the art in view of the prior art. Accordingly, a *prima facie* case of obviousness has not been established with respect to claims 5-9 and 12-15, and the claims are allowable.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 5-9 and 12-15 under 35 U.S.C. § 103(a).

Rejection of Claims 10, 16, and 17 under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 10, 16, and 17 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of *Raszuk*, *Oyamada*, and *Goguen*, and further in view of *Filsfils* and further in view *Christie*. A *prima facie* case of obviousness has not been established.

Claims 10, 16, and 17 depend from claims 5, 6, and 7, respectively, and thus include all the elements thereof. As discussed above in regard to the rejection of claims 5-7, AAPA, *Raszuk*, *Oyamada*, and *Goguen*, whether taken alone or in combination, fail to teach or suggest at least "setting routing information and tunnel state information for each of at least two tunnels, by a double-ascription Provider Edge (PE) of a remote Customer Edge (CE) in the double-ascription PE itself which is connected with a nearby CE, <u>before the nearby CE visits the remote CE,</u> wherein, the double-ascription PE connected with the nearby CE serves as an initial node of each of the at least two tunnels, and at least two other PEs connected with the remote CE serve as terminal nodes of the at least two tunnels, respectively," as recited in claim 1 (emphasis added) and included in claims 5-7, and thus included in claims 10, 16, and 17.

The Office asserted that *Filsfils* and *Christie* teach elements of claims 10, 16, and 17. *See* Office Action, p. 10. Without acquiescing to this assertion, Applicant respectfully submits that *Filsfils* and *Christie* also fail to teach or suggest the above-noted elements, and thus does not cure the deficiencies of AAPA, *Oyamada*, and *Goguen*.

For at least this reason, the Office has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the invention of claims 10, 16, and 17. Moreover, there is no motivation for one of ordinary skill in the art to modify the references to achieve the claimed combination. Thus, no reason has been clearly articulated as to why claims 10, 16, and 17 would have been obvious to one of ordinary skill in the art in view of the prior art. Accordingly, a *prima facie* case of obviousness has not been established with respect to claims 10, 16, and 17, and the claims are allowable.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 10, 16, and 17 under 35 U.S.C. § 103(a).

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account no. 06-0916.

Respectfully submitted,

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